

IN THE CLAIMS:

Claims 1 and 43 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A contact pin assembly, comprising:
a substantially planar substrate;
a first contact pin having a contact end on a first side of the substrate, the first contact pin
configured physically independent from the substrate and formed in place and formed
from a first portion of the substrate; and
first compliant coupling structure to couple the first contact pin in a substantially orthogonal
orientation with the substantially planar substrate.
2. (Previously Presented) The contact pin assembly of claim 1, wherein the first contact pin further comprises conductive material around at least a portion of the first contact pin.
3. (Previously Presented) The contact pin assembly of claim 2, wherein the first compliant coupling structure is an electrically conductive compliant coupling structure for electrically coupling the conductive material of the first contact pin with the substrate.
4. (Previously Presented) The contact pin assembly of claim 3, wherein the conductive material around the at least a portion of the first contact pin comprises conductive plating for electrically coupling with the first compliant coupling structure.

5. (Original) The contact pin assembly of claim 2, further comprising a wire bond extending from the conductive material of the first contact pin to the substrate.

6. (Previously Presented) The contact pin assembly of claim 1, wherein the first compliant coupling structure is an elastomer material.

7. (Previously Presented) The contact pin assembly of claim 1, wherein the first contact pin further comprises a first conductor formed therein from the contact end to an interconnect end of the first contact pin.

8. (Previously Presented) The contact pin assembly of claim 7, wherein the first contact pin further comprises a conductive block coupled to one of the contact end and the interconnect end of the first conductor.

9. (Previously Presented) The contact pin assembly of claim 8, wherein the conductive block is generally rigid.

10. (Previously Presented) The contact pin assembly of claim 8, wherein the conductive block is comprised of a compliant material.

11. (Previously Presented) The contact pin assembly of claim 7, further comprising a wire bond from the interconnect end of the first conductor to the substrate.

12. (Previously Presented) The contact pin assembly of claim 1, wherein the first compliant coupling structure is a thinned portion of the substrate coupling an interconnect end of the first contact pin with the substrate.

13. (Previously Presented) The contact pin assembly of claim 1, wherein the substrate is thinner than a length of the first contact pin.

14. (Previously Presented) The contact pin assembly of claim 1, wherein the substrate is a semiconductor wafer.

15. (Original) The contact pin assembly of claim 1, further comprising at least one stop formed on the substrate and configured to establish a maximum range of motion of the first contact pin.

16. (Original) The contact pin assembly of claim 1, further comprising a conductive bump on the contact end of the first contact pin.

17. (Original) The contact pin assembly of claim 1, wherein the contact end of the first contact pin further comprises a profile configured to facilitate electrical coupling of the first contact pin with a contact pad of a device-under-test.

18. (Original) The contact pin assembly of claim 1, further comprising:
a second contact pin having a contact end on a second side of the substrate and formed in place from a second portion of the substrate; and
second compliant coupling structure to couple the second contact pin in an orthogonally compliant orientation with the substrate.

19. (Original) The contact pin assembly of claim 18, further comprising a conductive trace configured to electrically couple the first and second contact pins.

20. (Previously Presented) The contact pin assembly of claim 18, further comprising:
an electrically conductive via extending between the first and second sides; and
at least one conductive trace electrically coupled to the electrically conductive via and configured to electrically couple together the first and second contact pins.

21.-42. (Cancelled).

43. (Currently Amended) A contactor card, comprising:
a substrate configured for attachment with a semiconductor tester; and
at least one contact pin assembly, including:
a substantially planar substrate;
a first contact pin configured physically independent from the substrate and formed in place and formed from a first portion of the substrate; and
first compliant coupling structure to couple the first contact pin in a substantially orthogonal orientation with the substrate.

44. (Original) The contactor card of claim 43, wherein the contact pin further comprises conductive plating around at least a portion of the first contact pin.

45. (Original) The contactor card of claim 44, wherein the first compliant coupling structure is an electrically conductive compliant coupling structure for electrically coupling the conductive plating of the first contact pin with the substrate.

46. (Original) The contactor card of claim 45, wherein the substrate further comprises conductive plating for electrically coupling with the electrically conductive compliant coupling structure.

47. (Original) The contactor card of claim 44, further comprising a wire bond extending from the conductive plating of the first contact pin and the substrate.

48. (Original) The contactor card of claim 43, wherein the first compliant coupling structure is an elastomer material.

49. (Original) The contactor card of claim 43, wherein the first contact pin further comprises a first conductor from a contact end to an interconnect end of the first contact pin.

50. (Original) The contactor card of claim 49, wherein the first contact pin further comprises a conductive block coupled to one of the contact end and the interconnect end of the first conductor.

51. (Original) The contactor card of claim 50, wherein the conductive block is generally rigid.

52. (Original) The contactor card of claim 50, wherein the conductive block is comprised of a compliant material.

53. (Original) The contactor card of claim 49, further comprising a wire bond from the interconnect end of the first conductor to the substrate.

54. (Original) The contactor card of claim 43, wherein the first compliant coupling structure is a thinned portion of the substrate coupling an interconnect end of the first contact pin with the substrate.

55. (Previously Presented) The contactor card of claim 43, wherein a contact end of the first contact pin further comprises a profile configured to facilitate electrical coupling of the first contact pin with a contact pad of a device-under-test.

56. (Previously Presented) The contactor card of claim 43, wherein the at least one contact pin assembly further comprises:

a second contact pin having a contact end on a second side of the substrate and formed in place from a second portion of the substrate; and
second compliant coupling structure to couple the second contact pin in an orthogonally compliant orientation with the substrate.

57. (Previously Presented) The contactor card of claim 56, wherein the at least one contact pin assembly further comprises a conductive trace configured to electrically couple the first and second contact pins.

58. (Previously Presented) The contactor card of claim 56, wherein the at least one contact pin assembly further comprises:
an electrically conductive via extending between a first side and the second side; and
at least one conductive trace electrically coupled to the electrically conductive via and configured to electrically couple together the first and second contact pin.

59.-99. (Cancelled).